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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/255,213 02/22/99 MARTIN

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IM22/0705  
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EXAMINER

PASTERCZYK, J

ART UNIT

PAPER NUMBER

1755

DATE MAILED:

07/05/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/255,213

Applicant(s)  
Martin

Examiner  
J. Pasterczyk

Group Art Unit  
1755



☒ Responsive to communication(s) filed on Feb 29, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-18 is/are pending in the application.

Of the above, claim(s) 11-18 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-10 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 1-18 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-10, drawn to a catalyst system, classified in class 502, subclass 103.
- II. Claims 11-18, drawn to an olefin polymerization process, classified in class 526, subclass 160.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process for using the product as claimed can be practiced with another materially different product, such as a Ziegler-Natta catalyst or a chromium oxide catalyst.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Edward L. Bowman, Esq., on 5/1/00, a provisional election was made with traverse to prosecute the invention of group I, claims 1-10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Use of the term "system" is noted throughout the claims and specification of the present application. Unless applicant amends both to use 35 USC 101 statutory language for one of the recognized classes of invention, the examiner will consider "system" to mean "composition".

6. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the metallocene being a transition metal metallocene, does not reasonably provide enablement for a lanthanide, actinide, or main-group metal metallocene. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Only transition metal metallocenes are disclosed in the present specification, and although lanthanide and actinide metallocenes are known to function as olefin polymerization catalysts, main-group metal metallocenes generally do not have that ability, hence the presently-rejected claims are considered to be overbroad in their scope.

7. Claims 6-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, last line, "4-tetrabutylphenyl" apparently should be --4-tert-butylphenyl--.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Brant et al., USP 5,444,145 (hereafter referred to as Brant) and Luciani et al., USP 5,529,966 (hereafter referred to as Luciani).

Each of Brant and Luciani discloses a metallocene having a dialkylamido functional group, Brant at col. 14, table 1, two thirds of the way down the Q column, Luciani in the abstract.

Neither of these references discloses that the dialkylamido group has one of its alkyl groups substituted with a hydrogen.

However, such a substitution would have been within the skill of the routineer in the art to achieve with only minor routine experimentation.

It would have been obvious to one of ordinary skill in the art to apply that skill to the teachings of either of Luciani or Brant with a reasonable expectation of obtaining a highly-useful olefin polymerization catalyst with the expected benefit of the catalyst affording high molecular weight polymers with small MWD values.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is (703) 308-3497. Our fax number is 305-5433.

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Mark L. Bell  
Supervisory Patent Examiner  
Technology Center 1700



J. Pasterczyk

July 2, 2000